

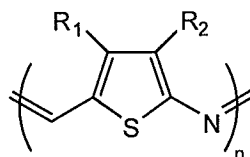
Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of the Claims:

Claims 1-28 (cancelled)

29. (previously presented) An electrically conducting polymer comprising the formula:



wherein:

R₁ and R₂ are independently selected from the group consisting of H, CN, C₁-C₁₀ alkyl group and CO₂R₄;

R₄ is a C₁-C₁₀ alkyl group; and

n is an integer ranging from 4 to 50 000.

30. (previously presented) The electrically conducting polymer of claim 29, wherein said polymer is treated with a doping agent.

31. (previously presented) The electrically conducting polymer of claim 30, wherein said doping agent is selected from the group consisting of a p-type dopant and an n-type dopant.

32. (previously presented) The electrically conducting polymer of claim 31, wherein said p-type dopant is selected from the group consisting of chlorine, bromine, iodine, AlCl₃, FeCl₃, GaCl₃, CF₃CO₂H, HCl, H₂SO₄, CH₃SO₃H.

33. (currently amended) The electrically conducting polymer of claim 32, wherein said n-type dopant is selected from the group consisting of sodium naphthalide, SbF_5 , AsF_5 , PF_5 , AgX , NO_2X , and NOX , wherein X is a non-nucleophilic anion.
34. (cancelled)
35. (currently amended) The electrically conducting polymer of claim ~~[[34]]~~ 33, wherein the non-nucleophilic anion is selected from the group consisting of BF_4^- , PF_6^- , SbF_6^- , ClO_4^- , sulfonic acid anions and carboxylic acid anions.

Claims 36-51 (cancelled)